

# CMR Chemistry and Metallurgy Research Facility



The Los Alamos National Laboratory (LANL) Chemistry and Metallurgy Research (CMR) building supports research and experimental activities for plutonium and uranium analytical chemistry and metallurgy.

## The CMR Facility

In 1952, the first LANL CMR facility was completed. At that time, the CMR was one of the world's first research and experimental facilities for analytical actinide chemistry and metallurgy. Upgrades to the original CMR were completed in 2002.

In 2012, the CMR facility totals 550,000 square feet, including an administrative wing, an office wing, six laboratory wings,

and one area that includes hot cells that provide heavy shielding and remote-handling capabilities for work on highly radioactive materials. Three laboratory wings are in various stages of shutdown.



The CMR boasts a full capability for analytical chemistry and metallurgical studies on small samples of nuclear materials in support of national security programs, including support of plutonium pit manufacturing and surveillance programs. Analyses performed at the CMR on plutonium samples are critical to the national security goal of assuring that plutonium specifications are met for pit production and testing.



## Capabilities Supporting National Security

The CMR houses key capabilities for analytical chemistry, uranium processing, destructive and non-destructive analysis of nuclear materials, and actinide research, processing, and metallography. These capabilities support a number of national security programs, such as non-proliferation and nuclear safeguards, counter-proliferation, stockpile surveillance, nuclear materials technologies, and technology development for waste treatment and minimization.

## The CMRR Project

In response to numerous issues associated with the aging CMR facility, LANL began the Chemistry and Metallurgy Research Replacement (CMRR) project. The CMRR project includes design, construction, and start-up of modern laboratory facilities and office space, as well as the relocation of mission-critical technical capabilities from the existing CMR facility to the new CMRR. The original construction schedule for the CMRR estimated completion by 2017. However, construction was halted in 2012 for lack of funding, and a new schedule will need to be developed for 2013 and beyond.